### INTERNATIONAL

# Europe Faces Tough Pipeline Choices

By David Brand

Staff Reporter of THE WALL STREET JOHNAL LONDON—There is growing alarm in European government and business circles over what happens next on the Soviet pipeline embargo. If the U.S. doesn't back down, they say, then European companies might be forced to seek ways to further defy Uncle Sam.

President Reagan's ban on the use of American-designed equipment for the natural-gas pipeline to Western Europe could be circumvented in several ways by European manufacturers, analysts say—but probably at the cost of seriously weakening the Western alliance. In that case, observes one European businessman, "Only the Soviets will be the winners, because the embargo isn't going to have any effect at all in slowing down the pipeline's construction."

For the European companies that have orders to deliver U.S. designed equipment to the Soviets, the choices are painful. If they fall to honor their contracts, the Soviets could impose penalties rumored to be as higi, as 5% on roughly \$1 billion of orders. Against this they must balance the cost of penalties that might be imposed should the Reagan administration decide to drag them through the U.S. courts for ignoring the embargo.

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The sanctions on U.S. technology are centered on the huge General Electric-designed turbines that will drive the 42 compressor stations spaced along the 2,000-mile pipeline. Each station will require up to three of the 25-megawatt turbines to drive the compressors, which, like giant fans, will push the natural gas along the

The Soviets will need 125 of these turbines, but the European manufacturers have only 23 in production at present, with the essential parts made in the U.S. It is being widely suggested that the Europeans might simply ignore the U.S. and begin making the parts for the remaining turbines themselves. These, it is believed, could be supplemented by clusters of lesspowerful Soviet-built turbines. So much national pride is at stake in the Soviet Union over the project "that it's very likely they will succeed in beating the embargo," says Jonathan Stern, a London-based Soviet-energy analyst. ALLEGATE SECTIONS

#### GE's \$175 Million Contract

Last year the Soviets contracted to buy the 125 turbines from three European manufacturing associates of General Electric: Nuovo Pignone of Italy, a subsidiary of state-owned Ente Nazionale Idrocarburi (57 turbines): AEG-Kanis Turbinenfabrik G.m.b.H. of West Germany, a subsidiary of AEG-Telefunken AG (47 turbines); and John Brown Engineering Co. of Britain (21 turbines). The firms were to build the turbines, except for the components, such as blades, for the rotors, which were to be supplied by General Electric in the U.S. under a \$175 million contract with the European firms.

Under a separate contract with the Soviets, the French company Alsthom-Atlantique, a subsidiary of Cie. Generale d'Elec-

tricite, was to provide 40 sets of rotor components to the Soviets to be used as spares. Alsthom is the only company in the world with a GE license to make this equip-

ment.

Last December, after martial law was imposed in Poland, the U.S. embargoed all U.S. exports of oil and gas equipment and technology to the Soviet Union. As a result, GE was told it would need an export license for the rotor components, but this wasn't issued. But GE already had shipped 21 sets of rotor parts to the British, Italian and West German companies that were building the turbines. Two other sets of parts are believed to have reached one of the three companies from another source.

In mid-June the embargo was extended to include all U.S. companies' foreign subsidiaries and European companies manufacturing under U.S. licenses. The French replied by ordering Alsthom to honor its Soviet contract. The British told John Brown and other companies that they couldn't obey the U.S. sanctions. The Italians also said the contracts would be honored, and the West Germans voiced their opposition to the embargo.

#### First Turbines This Month

By the end of this month John Brown plans to send the first six GE turbines to the Schiet Union. AEG-Kanis and Nuovo Pignone will be sending their initial deliveries over the next few months. But what happens when the 23 sets of rotor parts are exhausted?

Businessmen and government officials are understandably sensitive about this question and decline to be identified. But all point to Alsthom as being the obvious supplier of parts to manufacture a further 40 turbines. Instead of shipping the parts to the Soviets as spares, they simply would be fitted in the three companies' turbine frames

The snag here is that Alsthom's production isn't due to start until early 1984, and initial deliveries of natural gas are supposed to be flowing through the pipeline by late 1984.

Addressing this problem in a statement to a Senate subcommittee late last month, Edward Hewett, an economist at the Brookings Institution, noted that "if Alsthom could speed up its current investment and production schedule so that blades and rotors began to come off their lines in, say, mid-1983... and even if they produce at the anticipated rate of two blades and rotors per month, then by mid-1985 the Soviets would have up to 63 turbines in full operating condition (the original 23 plus 40 more with parts from Alsthom).

This timing might be adequate for the Soviets to get the pipeline working in time. Mr. Stern, the London-based Soviet-energy analyst, points out that in its early stages the pipeline will run at a mere one-third of its planned capacity, delivering 335 billion cubic feet a year of the line's planned capacity of 1.236 trillion cubic feet. That would mean, he says, that the pipeline could function with as few as 10 compressor stations, equipped with only 30 turbines. Even as natural gas deliveries increase, he says, the line would still require by 1986 only 20 compressor stations or 60 turbines.

This number, says Mr. Stern, might just be enough for the Soviets a scrape by because to date they only have orders from Western Europe to supply 741 million cubic feet of natural gas a year, well below the pipeline's capacity. But if the Italians decide to come in with orders, as is expected, natural gas deliveries would rise to 1.06 trillion cubic feet a year. That amount would be so close to the pipeline's planned capacity that analysts believe is would be essential to have the full complement of 125 turbines if the Soviets are to ensure re'ability of supplies.

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Thus the Soviets will be short 62 turbines. Some analysts wonder it Alsthom

will further defy the U.S. and build an adontional 62 sets of retor parts beyond the 40 arready contracted for. This possibility was voiced by the Brookings Institution's Mr. Hewett when he said, "If Alsthom and the French government are willing to face the possibility of U.S. economic retaliation. then Alsthorn could provide the key link in an all-European solution to this problem." However, the French government has em-phasized that to date it has ordered Aistnom only to honor the contract signed before the original sanctions last Decem-

Another possible solution raised by peopie in industry and government in London is that the Soviets could turn to another manufacturer, such as Rolls Royce Ltd., capable of providing its own turbines. However, the Soviets would be presented with considerable technical problems in mixing two types of turbines. And in any case, Prime Minister Margaret Thatcher might be loathe to cross swords openly with the Reagan administration.

There is also the possibility of a Soviet solution to the problem. The Soviets haven't yet managed to produce the big 25megawatt turbines but they do have smaller 10-megawatt machines. These, says analyst Stern, could be used in clusters to replace the missing GE turbines, although at a loss of efficiency and at great cost since they would have to be diverted from other projects.

## Soviets Test Blg Turbines

The Soviets do have the larger turbines in the final stages of testing in two plants in Leningrad. But Mr. Stern doubts, destite Soviet statements to the contrary, that they can be pushed into production fest enough to be put into service on the pipeline.

The main hope of the four European manufacturers is that the U.S. ultimately will back down. If it doesn't, then it is likely that the European companies will face civil actions for breaking the embargo. John Brown, as the first company of the U.S. embargo "would be to call in

There appears to be little doubt that the firms."

## Opus Dei Denies Link To Banco Ambrosiano

A WALL STREET JOURNAL News Roundup

Opus Dei, a Roman Catholic organization of priests and lay persons, denied in Rome and New York a report that it had been considering helping the Vatican bank reduce its controversial debt in Banco Ambrosiano, the troubled Milan bank.

Opus Dei was responding to a report in The Wall Street Journal that quoted Carlo Calvi, son of the late president of Banco Ambrosiano, Roberto Calvi, as saying that Roberto Calvi before his death had been on the verge of completing an agreement that would have reduced the Vatican bank's holdings in Banco Ambrosiano and its debt to that bank. That debt would have been assumed by Opus Dei, according to the younger Mr. Calvi.

"The goals of Opus Dei are exclusively spiritual ..." the Associated Press reported an Opus Dei statement as saying in Rome. "It is therefore false that Opus Del would have any part in whateve- financial-economic operation of any entity." In New York, an Opus Dei spokesman added: "... the allegations concerning Opus Dei are completely without basis and flatly denied.

U.S. is prepared to take such action. Asked recently if the U.S. can enforce its actions, Treasury Secretary Donald Regan said, "Had we not been confident of our decision, I don't think we would have made

their intention to fight back. A message delivered in Washington by the European: Common Market last week called the sanctions "contrary to international law." It warned that "one inevitable consequence" to ship its turbines, is likely to be the first a question the usefulness of technological to face litigation. While the first and links between European and American

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